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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/866,259  
Filing Date: May 25, 2001  
Appellant(s): YIK ET AL.

\_\_\_\_\_  
Anthony F. Bonner, Jr (55,012)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/14/2009 appealing from the Office action mailed 2/25/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,996,021	Civanlar et al.	11-1999
4,893,340	Lubarsky et al.	01-1990
2003/0014665	Anderson et al.	01-2003

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6,069,889	Feldman et al.	05-2000
2002/0147916	Strongin et al.	10-2002
7,065,644	Daniell	06-2006
6,870,844	Tuck et al.	03-2005
2002/0156888	Lee et al.	10-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3 – 7 and 10 – 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. U.S. PG-Publication No. (2002/0156888).

As per claims 1, 3, 4, 5, 6, 7, 10 and 13 Lee discloses a plurality of communications ports (Lee, Paragraph 0020, plurality of ports) a switching database having a plurality of switching entries, each one of the plurality of switching entries specifying an association between a one or more data network node identifiers and a one or more respective communications ports (Lee, Paragraph 0020, switching fabric that dealing with plurality of nodes and links), a plurality of switching entry protection flags, corresponding to the plurality of switching entries, each of the plurality of switching entry protection flags configured with a predetermined value that determines whether each of the switching entries is protected from update (Lee, Paragraph 0058, validity flag) and a controller executing a secure switching database update process, for at least one of the switching entries, wherein executing a secure switching database update process includes determining, from at least one of the switching entry protection flags, whether the at least one of the switching entries is protected from, update and

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receiving a modification instruction including a change of at least one of the respective communications ports for at least one of the data network node identifiers (Lee, Paragraph 0049, update process to keep switch updated), whereby an attempt by a hostile data network node to effect a modification of the at least one communication port of a protected switching entry is prevented when the protection flag is set, enabling the data switching node to operate securely concurrently in friendly and hostile data networking environments (Lee, Paragraph 0062, Flag set to invalid and is disabled and not updated).

As per claim 11, Lee discloses a step of suppressing the replications of the data traffic to the source communications port (Lee, Paragraph 0062, Flag set to invalid and is disabled and not updated).

As per claim 12, Lee discloses suppressing the replication of the data traffic to communications ports having the associated unknown destination flood control bit set (Lee, Paragraph 0062, Flag set to invalid and is disabled and not updated).

As per claim 14, Lee discloses a step of suppressing the replication of the data traffic to the source communications port (Lee, Paragraph 0062, Flag set to invalid and is disabled and not updated).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. U.S. PG-Publication No. (2002/0156888) in view of Civanlar et al. U.S. Patent No. (5,996,021).

As per claim 2, Feldman fails to teach the communication ports are represented in the switching entries via port identifiers. However, in an analogous art Civanlar teaches the communication ports are represented in the switching entries via port identifiers (Civanlar, Col. 9 Lines 6 – 26).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Civanlar's Internet protocol relay network with Lee's method for detecting and reporting configuration errors in a multi-component switching fabric because it offers the advantage of PORT ID fields having local significance depending on the particular IPRR and the destination of the IP Packet (Civanlar, Col. 9 Lines 6 – 26).

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. U.S. PG-Publication No. (2002/0156888) in view of Lubarsky et al. U.S. Patent No. (4,893,340).

As per claim 8, Feldman fails to teach the topology discovery disable flag is associated with the source communications port. However, in an analogous art

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Lubarsky teaches the topology discovery disable flag is associated with the source communications port (Lubarsky, Col. 24 Lines 13 – 27).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Lubarsky's multijunction unit apparatus for a digital network with Lee's method for detecting and reporting configuration errors in a multi-component switching fabric because it offers the advantage of proper routing of information in a system.

As per claim 9, Feldman fails to teach the topology discovery disable flag is associated with all physical communications ports of the data switching node. However, in an analogous art Lubarsky teaches the topology discovery disable flag is associated with all physical communications ports of the data switching node (Lubarsky, Col. 24 Lines 13 – 27).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Lubarsky's multijunction unit apparatus for a digital network with Lee's method for detecting and reporting configuration errors in a multi-component switching fabric because it offers the advantage of proper routing of information in a system.

Claims 15 – 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. U.S. PG-Publication No. (2002/0156888) in view of Daniell et al. U.S. Patent No. (7,065,644).

As per claims 15 – 20, Feldman fails to teach an alarm configured for trigger if at least one of the switching entries is protected from update. However, in an analogous art Daniell teaches an alarm configured for trigger if at least one of the switching entries is protected from update (Daniell, Col. 6 Lines 62 – 67 and Col. 7 Lines 1 – 2, security application alerts administrator of unauthorized changes).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Daniell's system for protecting a security profile of a computer system with Lee's method for detecting and reporting configuration errors in a multi-component switching fabric because it offers the advantage of enforcing a set of rules that prevent unauthorized users from accessing or modifying applications (Daniell, Col. 1 Lines 20 - 23).

#### **(10) Response to Argument**

##### **Response to Section A)**

No arguments.

##### **Response to Section B)**

A reoccurring argument that exists but is not argued in detail enough by the appellant, is the argument against the intended use of the independent claims. The Examiner in previous office actions has argued with the appellant that certain limitations that exist in the independent claims are intended use. Appellant's argument lack support to overcome these arguments. The MPEP states that a claimed invention must result in a structural difference between the claimed invention and the prior art in order



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to patentably distinguish the claimed invention from the prior art. The Examiner intends to show that there is no structural difference in any of the arguments regarding intended use.

**Part 1 regarding claim 1:**

Appellant, first addresses the validity of the Prior art of Lee. Lee is a U.S. PG-Publication which claims priority from Provisional Application 60/285, 936. Appellant argues that the Provisional application fails to provide full support of the PG-Publication. Examiner respectfully disagrees. Lee's invention teaches on paragraph 0058 of the Publication that a port has an associated validity flag. The validity flag determines whether the port is enabled or disabled based on the setting of the flag. This same concept is taught by Lee's provisional on Page 9, where it states "Each port has a special flag indicating whether the port is enabled (versus disabled)." This support the concept in the Lee PG-Publication that a port has an associated flag which given a value is enabled or disabled.

Further appellant argues that Lee fails to teach "switching entry protection flags configured with a predetermined value that determines whether each of the switching entries is protected from update." Examiner respectfully disagrees. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In claim 1, the claim language calls these flags protection flags. The limitations of claim 1, state the flags will be used to protect against updates. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in

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the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the port flag is disabled and data is prevented from coming through it is inherent that the port will be protected from the update information the appellant is arguing.

**Part 2 regarding claim 3:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.

Appellant argues that Lee fails to teach "secure data switching node comprising... a plurality of topology discovery disable flags corresponding to the plurality of switching entries, each of the plurality of topology discovery disable flags configured with a predetermined value that determines whether additional switching entries are prevented from being added to the switching database... [and] a controller..., determining, from at least one of the topology discovery disable flags, whether switching entries are prevented from being added to the switching database," as recited in claim 3. Examiner respectfully disagrees. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called disable flags and

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based on the predetermined value, switching entry data is prevented. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the disabled flag is set to disable communication the data is prevented from coming through it is inherent that the port will be protected from the switching entry data the appellant is arguing.

**Part 3 regarding claim 4:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.

Appellant argues that Lee fails to teach "secure data switching node comprising..., a plurality of topology discovery disable flags, corresponding to the plurality of switching entries, each of the plurality of topology discovery disable flags configured with a predetermined value that determines whether additional switching entries are prevented from being added to the switching database..., a global unknown destination flood control flag... [and] a controller..., determining, from at least one of the topology discovery disable flags, whether switching entries are prevented from being added to the switching database" as recited in claim 4. Examiner respectfully disagrees.

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Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called disable flags and based on the predetermined value, switching entry data is prevented. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the disabled flag is set to disable communication the data is prevented from coming through, it is inherent that the port will be protected from the switching entry data the appellant is arguing.

**Part 4 regarding claim 5:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.

Appellant argues that Lee fails to teach "secure data switching node comprising..., a plurality of unknown destination flood control flags, corresponding to the plurality of switching entries, each of the plurality of unknown destination flood control flags configured with a predetermined value that determines whether replication of Payload Data Unit (PDU) to communication ports is prevented" as recited in claim 5. Examiner

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respectfully disagrees. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called flood control flags and based on the predetermined value, will determine whether or not to prevent the replication of payload data unit to the communication ports. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the flood control flag is set to disable communication, then it is inherent that the replication of payload data unit to the communication port is prevented.

**Part 5 regarding claim 6:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.

Appellant argues that Lee fails to teach "method of securely updating a switching database of a data switching node forwarding data traffic in a data transport network, the method comprising steps of... modifying the communications port specification of a switching entry found to correspond to the extracted source data network node identifier, ff a switching entry protection flag associated with the found switching entry is

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reset whereby preventing a redirection of data traffic processed by the data switching node" as recited in claim 6. Examiner respectfully disagrees. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called switching entry protection flags and based on the predetermined value, will determine whether or not to prevent the redirection of data traffic processed by the data switching node. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the switching entry flag is set to disable communication, the data is prevented from coming through, it is inherent that the port will prevent the redirection of data traffic processed by the data switching node.

**Part 6 regarding claim 7:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.

Appellant argues that Lee fails to teach "method of securely updating data transport network topology information held in a switching database of a data switching

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node associated with the data transport network, the method comprising steps of... a topology discovery disable flag configured to indicate whether switching entries are prevented from being added to the switching database" as recited in claim 7. Examiner respectfully disagrees. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called disable flags and based on the predetermined value, switching entry data is prevented from being added or not. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the disabled flag is set to disable communication the data is prevented from coming through it is inherent that the port will be protected from the switching entry data being added or not the appellant is arguing.

**Part 7 regarding claim 10:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.

Appellant argues that Lee fails to teach "secure method of forwarding data traffic having a destination unknown to a data switching node, the method comprising steps of... a global unknown destination flood control flag configured to indicate whether replication of PDU to communication ports is prevented" as recited in claim 10. Examiner respectfully disagrees. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called flood control flags and based on the predetermined value, will determine whether or not to prevent the replication of payload data unit to the communication ports. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the flood control flag is set to disable communication, then it is inherent that the replication of payload data unit to the communication port is prevented.

**Part 8 regarding claim 13:**

All arguments regarding the provisional applications validity please refer to the arguments in Section B) Part 1 regarding the provisional.



Appellant argues that Lee fails to teach "secure method of forwarding data traffic having a destination unknown to a data switching node, the method comprising steps of... an unknown destination flood control flag configured to indicate whether replication of PDU to communication ports is prevented" as recited in claim 13. Appellant's invention is essentially a node with a plurality of ports. Each port will be assigned a flag and a predetermined value will be given to each flag to determine a certain operation. In this case the flags are called flood control flags and based on the predetermined value, will determine whether or not to prevent the replication of payload data unit to the communication ports. The essential structure of the claimed invention is just a plurality of ports with associated flags. One of ordinary skill in the art would know that a flag will be given a predetermined value usually a '0' or '1', and based on the intended use of the system each value represent will represent a certain function. Lee teaches the use of values would be to disable a port based on the flag value. If the flag is set to disable data is prevented from coming through the port, so with regards to claim 1 of the claimed invention as supported on Paragraph 0058 of Lee. Now, if the flood control flag is set to disable communication, then it is inherent that the replication of payload data unit to the communication port is prevented.

**Part 9 regarding claims 11 and 12:**

Claims 11 and 12 are dependent on 10. No new arguments presented by appellant please defer the section regarding claim 10.

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**Response to Section C)**

No new arguments presented by appellant please defer the section regarding Section B. All dependent claims in this section were never relied upon to teach the limitations of the Independent claims.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Roderick Tolentino

/R. T./

Examiner, Art Unit 2439

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